

IN THE CLAIMS

1-138. (Cancelled)

139. (Previously presented) A smart card comprising:

a memory for storing information;

at least one transmitting or receiving antenna, suitable for transmitting or receiving acoustic signals; and

a low frequency circuit, adapted to handle transmission of information from the memory, or reception of information for storage in the memory, via said antenna on an acoustic carrier, which information is modulated on the acoustic carrier at a frequency of between 5 kHz and 100 kHz.

140. (Previously presented) A smart card according to claim 139, wherein said at least one antenna comprises an individual transmission antenna.

141. (Previously presented) A smart card according to claim 139, wherein said at least one antenna comprises an individual reception antenna.

142. (Previously presented) A smart card according to claim 139, wherein said at least one antenna comprises a combined antenna for both reception and transmission.

143. (Previously presented) A smart card according to claim 139, wherein said at least one antenna comprises an array antenna.

144. (Previously presented) A smart card according to claim 154, wherein said at least one antenna comprises an acoustic antenna.

145. (Previously presented) A smart card according to claim 154, wherein said at least one antenna comprises an RF antenna.

146. (Previously presented) A smart card according to claim 139, comprising a processor for processing said information.

147. (Previously presented) A smart card according to claim 146, wherein said processor generates a response to an interrogation of said smart card.

148. (Previously presented) A smart card according to claim 146, wherein said memory comprises a long-term memory.

149. (Previously presented) A smart card according to claim 146, wherein said memory comprises a temporary memory for said processor.

150. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is less than 80 kHz.

151. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is less than 60 kHz.

152. (Previously presented) A smart card according to claim 293, wherein said carrier frequency is less than 50 kHz.

153. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is less than 40 kHz.

154. (Previously presented) A smart card comprising:

a memory for storing information;

at least one transmitting or receiving antenna; and

a low frequency circuit, for handling information associated with said antenna and said memory, which information is modulated on a carrier frequency of between 5 kHz and 30 kHz.

155. (Previously presented) A smart card according to claim 154, wherein said carrier frequency is less than 25 kHz.

156. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is less than 21 kHz.

157. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is over 1
30 kHz.

158. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is over 14 kHz.

159. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is over 16 kHz.

160. (Previously presented) A smart card according to claim 139, wherein said carrier frequency is over 17 kHz.

161. (Previously presented) A smart card according to claim 139, wherein said at least one antenna comprises a piezoelectric antenna.

162. (Previously presented) A smart card according to claim 139, comprising a high-frequency circuit for modulating information on a carrier frequency higher than 200 kHz.

163. (Previously presented) A smart card according to claim 139, comprising a high-frequency circuit for modulating information on a carrier frequency higher than 1 MHz.

164. (Previously presented) A smart card according to claim 162, wherein said high frequency circuit comprises an RF circuit.

165. (Previously presented) A smart card according to claim 139, comprising a high frequency circuit adapted to demodulate information from a carrier frequency higher than 200 kHz.

166. (Previously presented) A smart card according to claim 139, wherein said smart card implements a two-way communication protocol.

167. (Previously presented) A smart card according to claim 166, wherein said protocol

comprises an error correction protocol.

168-189. (Cancelled)

190. (Withdrawn-currently amended) A smart card according to claim 139, comprising:

~~-----a memory;~~

~~-----an external communication link for communicating information to or from said memory;~~

and

a biometric data acquisition circuit, for acquiring biometric data, wherein said biometric data acquisition circuit shares an input transducer with said ~~communication~~low frequency circuit~~link~~.

191. (Cancelled)

192. (Withdrawn) A smart card according to claim 190, wherein said biometric data acquisition circuit comprises a voice input circuit.

193. (Withdrawn) A smart card according to claim 190, wherein said biometric data acquisition circuit comprises a motion determination circuit.

194. (Withdrawn) A smart card according to claim 193, wherein said biometric data comprises motion of the smart card in the form of a gesture.

195. (Withdrawn) A smart card according to claim 193, wherein said biometric data comprises motion of the smart card in the form of handwriting.

196. (Withdrawn) A smart acrd according to claim 190, comprising a processor for evaluating said biometric data against a sample of biometric data.

197. (Withdrawn-currently amended) A smart card according to claim 196, wherein said sample of biometric data is stored in said memory.

198. (Withdrawn) A smart acrd according to claim 190, wherein said acquired biometric data is

stored in said memory.

199-202 (Cancelled)

203. (Withdrawn-currently amended) A smart card according to claim 190, comprising :
-----an array of pressure detectors for determining spatial positions of pressure changes on
said array;
-----a memory; and
-----~~an external communication link for transmitting information from said card responsive~~
~~to information in said memory and said detected pressure changes.~~

204. (Withdrawn) A smart card according to claim 203, wherein said array of detectors comprises a surface acoustic wave (SAW) detector.

205. (Withdrawn) A smart card according to claim 203, wherein said array of detectors comprises an array of individually electrified piezoelectric elements.

206-276. (Cancelled)

277. (Previously presented) A smart card according to claim 139, wherein said antenna radiates or receives far-field radiation.

278. (Previously presented) A smart card according to claim 139, wherein said card transmits information without a carrier wave.

279. (Cancelled)

280. (Previously presented) A smart card according to claim 154, wherein said at least one antenna comprises at least one transmission antenna and at least one separate reception antenna.

281. (Previously presented) A smart card according to claim 154, wherein said at least one antenna comprises a piezoelectric antenna.

282. (Previously presented) A smart card according to claim 154, comprising a high-frequency circuit for modulating information on a carrier frequency higher than 200 kHz.

283. (Previously presented) A smart card, comprising:

- a memory for storing information;

- at least one transmitting or receiving piezoelectric antenna; and

- a low frequency circuit, for handling information associated with said antenna and said memory, which information is modulated on a carrier frequency of between 5 kHz and 100 kHz.

284. (Previously presented) A smart card according to claim 283, wherein said at least one antenna comprises at least one transmission antenna and at least one separate reception antenna.

285. (Previously presented) A smart card according to claim 283, wherein the low frequency circuit is adapted for transmission of acoustic signals through the piezoelectric antenna.

286. (Previously presented) A smart card according to claim 283, comprising a processor for processing said information and wherein the memory comprises a temporary memory for said processor.

287. (Previously presented) A smart card according to claim 283, comprising a high-frequency circuit for modulating information on a carrier frequency higher than 200 kHz.

288. (Previously presented) A smart card, comprising:

- a memory for storing information;

- at least one transmitting or receiving antenna;

- a low frequency circuit, for handling information associated with said antenna and said memory, which information is modulated on a carrier frequency of between 5 kHz and 100 kHz; and

- a high frequency circuit, for handling information associated with said antenna and said memory, which information is modulated on a carrier frequency higher than 1 MHz.

289. (Previously presented) A smart card according to claim 288, wherein said at least one antenna comprises at least one transmission antenna and at least one separate reception antenna.

290. (Previously presented) A smart card according to claim 288, wherein said at least one antenna comprises an acoustic antenna.

291. (Previously presented) A smart card according to claim 288, comprising a processor for processing said information and wherein the memory comprises a temporary memory for said processor.

292. (Cancelled)

293. (Previously presented) A smart card, comprising:

a memory for storing information;

at least one receiving antenna; and

a low frequency circuit, for handling information transmitted to the at least one receiving antenna, which information is modulated on a carrier frequency of between 5 kHz and 100 kHz.

294. (Previously presented) A smart card according to claim 293, wherein said carrier frequency is less than 25 kHz.

295. (Previously presented) A smart card according to claim 293, wherein said carrier frequency is about one of 22kHz, 24kHz, 32 kHz, 44 kHz or 48kHz.

296. (Previously presented) A smart card according to claim 235, wherein the second part is in the form of a badge holder.

297. (Previously presented) A smart card according to claim 235, wherein when the first separable part is held by the second separable part, the second part allows a clear field of view to the first part.

298. (Previously presented) A smart card according to claim 238, wherein the first separable part also includes a battery.

299. (Previously presented) A smart card according to claim 241, wherein the second part enhances the transmission range of the first part.